



26 October 2007

Mr. Bob Boggs
California Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2721

**Subject: Addendum to Draft Landfills 8 and 10 Field Sampling Plan
Presidio of San Francisco, California**

Dear Mr. Boggs:

Enclosed please find one hard copy and one electronic copy of the Field Sampling Plan Addendum (“FSP Addendum”), dated October 2007, to the *Draft Landfills 8 & 10 Field Sampling Plan, Presidio of San Francisco* (“FSP”), prepared by EKI for the Presidio Trust (“Trust”). This FSP Addendum has been prepared in response to comments and requests made during the 9 October 2007 Landfills 8 & 10 FSP stakeholder review meeting. At that time, the stakeholders agreed that trenching for Landfill 10 edge definition should be added to the planned field program at Landfills 8 & 10.

The National Park Service (“NPS”) has forgone advance review of this FSP Addendum and is reviewing this FSP Addendum concurrently with the DTSC. We would like to implement the field work in November 2007. The project manager for the Trust for this project is Genevieve Coyle. Please contact me at (415) 561-4259 if you have any questions.

Sincerely yours,
The Presidio Trust

Original Signed by

Craig Cooper
Remediation Program Manager

Enclosure

cc (with enclosure):

Devender Narala, Water Board
Brian Ullensvang, NPS

Doug Kern, RAB
Mark Youngkin, RAB (cover letter only)



Consulting Engineers and Scientists

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26 October 2007

Ms. Genevieve Coyle
Presidio Trust
34 Graham Street
Post Office Box 29052
San Francisco, California 94129-0052

Subject: Field Sampling Plan Addendum for Landfill 10 Trenching
Presidio Trust, San Francisco, California
(EKI A70004.07)

Dear Ms. Coyle:

On behalf of the Presidio Trust (“Trust”), Erler & Kalinowski, Inc. (“EKI”) has prepared this Field Sampling Plan Addendum (“FSP Addendum”) to the *Draft Landfills 8 & 10 Field Sampling Plan, Presidio of San Francisco* (“FSP”), dated 6 September 2007. This FSP Addendum has been prepared in response to comments and requests made during the 9 October 2007 Landfills 8 & 10 FSP review meeting with the Presidio Trust, the Department of Toxic Substances Control (“DTSC”), and the National Park Service (“NPS”). At that time, these stakeholders agreed that trenching for Landfill 10 edge definition should be added to the planned field program at Landfills 8 & 10.

As shown on Figure 2A, up to five edge definition trenches (LF10TP200 through LF10TP204) are proposed for the southern and eastern edges of Landfill 10. The data quality objectives for the soil trenching at LF10 are presented in Table 2A. The trenching approach is similar to that described for Landfill 8 in Section 4.1.1 of the FSP. Trenches are intended to provide edge definition. Locations will be finalized in the field with representatives of the Trust and will depend upon the presence of surface, subsurface, and overhead obstructions, as well as site topography and accessibility. As shown in Table 4A, soil samples will be analyzed for metals, petroleum hydrocarbons, and polycyclic aromatic hydrocarbons, the identified chemicals of concern at Landfill 10.

Field procedures and analytical methods described in the FSP will be implemented. The investigation will be implemented when the Trust receives required approvals and equipment can be scheduled. Ideally, this work will be added on to the work in the FSP.

Letter to Ms. Coyle (Presidio Trust)
26 October 2007
Page 2 of 2



If you have any questions please do not hesitate to call.

Very truly yours,

ERLER & KALINOWSKI, INC.

A handwritten signature in blue ink that reads "John T. DeWitt".

John T. DeWitt, P.E.
Project Manager

Attachments:

Table 2A

Table 4A

Figure 2A

DRAFT

TABLE 2A - DATA QUALITY OBJECTIVES
LANDFILL 10 SOIL TRENCHING FIELD INVESTIGATION
 Presidio of San Francisco, California

State the Problem	Identify the Decisions	Identify Inputs to the Decisions	Define the Study Boundaries	Develop Decision Rules	Specify Limits on Decision Errors	Optimize the Design
<p>General Problem Statement: The lateral extent (and thickness in the vicinity of Wedemeyer Street and 15th Avenue) of debris associated with Landfill 10 ("LF10") is not fully defined. This investigation intends to identify the presence or non-presence of debris east of Wedemeyer Street and identify the landfill boundary in the vicinity of 15th Avenue.</p> <p>LF10 DQO 1: The southern extent of the landfill in the area of the Presidio property boundary is not defined.</p>	<p>LF10 DQOs 1, 2, and 3: Do chemical concentrations in soil at the edge of the landfill debris exceed site-specific cleanup levels?</p> <p>LF10 DQO 1: What is the lateral and vertical extent of debris and/or chemical impacts in the southern area of the Presidio property boundary?</p>	<p>For all DQOs:</p> <ol style="list-style-type: none"> Ecological evaluation of proposed test pits location and timing to ensure each pit can be excavated without unacceptable damage to ecological resources. Utility surveys to be performed for all proposed test pit locations to determine final locations and extent. Results of new test pit logging and occurrence and character of debris/fill in test pits. Results of laboratory analyses of soil samples from this investigation. Results of previous test pit and boring investigations. Results of previous chemical analysis of soil samples. Comparison of analytical results with applicable cleanup levels. Metal results will also be compared to background screening levels. Observations made during the Trust's installation of telecommunications infrastructure in this area. 	<p>The test pit locations are shown on Figure 2A.</p> <p>LF 10 DQO 1: The southern margins of the LF10 Area.</p> <p>LF 10 DQO 2: The eastern margins of the LF10 Area adjacent to 15th Avenue.</p> <p>LF 10 DQO 3: The eastern margin of LF 10 adjacent to the southwest corner of Bldg 1801.</p>	<p>LF10 DQOs 1, 2, and 3:</p> <ol style="list-style-type: none"> If a sharp boundary between the landfill debris and native materials is observed, then the extent of the landfill is considered defined, and a soil sample will be collected in the native material beyond the landfill debris. If the boundary exhibits a transitional decline in the percentage of debris, then a soil sample will be collected for chemical analysis when the debris appears to be less than approximately 10%. If the debris transitions to less than 1% debris, then a backup soil sample will be collected for chemical analysis. If chemical concentrations exceed site-specific cleanup levels in the sample corresponding to 10% debris, then the sample representing 1% debris will be analyzed. If chemical concentrations exceed site-specific cleanup levels in the sample corresponding to less than 1% debris, then the lateral extent of the fill requiring remediation will be considered undefined and additional exploration will be required during remedial action. If visual observations in the field are inconsistent or inconclusive, then the Trust may call stakeholders to a field meeting discuss potential options while the field crew is still mobilized. Options could include additional test pits that were not originally identified in the field sampling plan. 	<p>1. Field, analytical, and data validation procedures will follow the QAPP (Tetra Tech, 2001) to the extent possible.</p> <p>2. A potential error would be to incorrectly quantify the chemicals present in the soil. The acceptable range of decision error would be a consequence of field and/or analytical errors and will be addressed through the data validation procedures.</p> <p>3. A potential error would be to incorrectly quantify the percentage of debris present in the soil. The use of experienced field personnel with oversight of a professional engineer or geologist will be used to limit quantification errors.</p>	<p>For all DQOs: Test pits are assumed to be excavated with a subcontractor operated backhoe. Excavation depths will be limited by this equipment. Trenches shall be extended sufficient lengths and depths as needed to achieve the DQOs while observing limits defined by ecological surveys and underground utilities. Trenches will be extended to determine the contact between landfill debris and the native soil, using visual observations and analytical data. Soil samples for chemical analysis will be collected from zones representing approximately 10% and 1% landfill debris, if such a transition in debris is observed. If a sharp demarcation is observed, soil samples will be collected from the native soil beyond the fill. Chemical samples will generally be collected in the center of the horizons to be tested, at least one foot below ground surface. Chemical samples will be analyzed for potential chemicals of concern at the site (see below). Soil samples from the 1% debris zone will be collected and extracted (to allow preservation to meet analytical holding times), but will only be analyzed if samples from the 10% debris zone exceed site-specific cleanup levels (for metals, only if the threshold screening level is exceeded). Field conferences with stakeholders are anticipated to obtain concurrence on observed characteristics of trenches.</p>
<p>LF10 DQO 2: The eastern boundary of LF10 in the area along 15th Avenue is not defined.</p>						
<p>LF10 DQO 3: The extent of LF10 along Wedemeyer St. near the southwest corner of Bldg 1801 is not defined.</p>						
</td						

Table 4A
Landfill 10 Soil Sample Laboratory Analysis Matrix
 Presidio of San Francisco, California

Sample ID (a)	Sample Depth (ft bgs) (b)	Matrix	Laboratory Analyses			Extract + Hold
			Title 22 Metals (EPA 6020)	TPHd and TPHfo (EPA 8015M)	PAHs (EPA 8270C)	
LF10TP200 (1%)	TBD	soil	*	*	*	H
LF10TP200 (10%)	TBD	soil				
LF10TP201 (1%)	TBD	soil				H
LF10TP201 (10%)	TBD	soil	*	*	*	H
LF10TP202 (1%)	TBD	soil				H
LF10TP202 (10%)	TBD	soil	*	*	*	H
LF10TP203 (1%)	TBD	soil				H
LF10TP203 (10%)	TBD	soil	*	*	*	H
LF10TP204 (1%)	TBD	soil				H
LF10TP204 (10%)	TBD	soil	*	*	*	H

Abbreviations:

EPA – United States Environmental Protection Agency

ft bgs – feet below ground surface

PAHs – polycyclic aromatic hydrocarbons

QAPP – Presidio-Wide Quality Assurance Project Plan, Sampling and Analysis Plan, Tetra Tech EMI Inc., dated April 2001.

TBD –To Be Determined

TPHd–Total petroleum hydrocarbons as diesel (carbon range C12-C24)

TPHfo–Total petroleum hydrocarbons as fuel oil (carbon range C24-C36)

* – Analyze

H – Extract + Hold

Notes:

- (a) Samples will be collected from zones representing approximately 10% and 1% landfill debris. Actual percentages of debris will vary, but efforts will be made to sample at approximately 10% and 1% debris concentrations. Soil samples from the 1% debris zone will be collected and extracted, but will only be analyzed if samples from the 10% debris zone exceed site-specific cleanup levels.
- (b) Sample depths to be determined in the field; soil samples will generally be collected within the debris, if present, at least one foot below ground surface.
- (c) Proposed soil samples will be analyzed on a ten day turnaround time by Curtis & Tompkins of Berkeley, California.
- (d) Per QAPP guidance, one duplicate will be collected for every ten samples on each day of field work. Duplicate samples will be noted with "DUP" in the Sample ID.
- (e) Selective Ion Monitoring ("SIM") may be used with EPA Method 8270 to achieve required detection limits.

